

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in this application.

Listing of Claims:

1. (Previously presented) An LED driving device comprising: a power supply voltage generator; an applied voltage storage that stores therein an applied voltage value on an each-color basis corresponding to a minimum emission voltage of an LED of each of colors, red, green and blue, provided in a display device; and an applied voltage former that converts a voltage generated in the power supply voltage generator into the applied voltage value stored in the applied voltage storage to apply to the LED of each of colors.
2. (Previously presented) An LED driving device comprising: a power supply voltage generator; an applied voltage storage that stores therein applied voltage values on an LED of each of colors, red, green and blue, provided in a display device, the values being the same on the same color, while being different between different colors; and an applied voltage former that converts a voltage generated in the power supply voltage generator into an applied voltage value stored in the applied voltage storage to apply to the LED of each of colors.
3. (Original) The LED driving device according to claim 1, wherein the applied voltage storage stores independent applied voltage values for LEDs of the same color.
4. (Original) The LED driving device according to claim 1, further comprising: a duty ratio storage which is comprised of writable memory and stores therein, independently of the LED of each

of colors, a duty ratio of a PWM signal to make a fine adjustment to luminance during an emission period of the LED of each of colors; a PWM controller which forms the PWM signal based on the duty ratio stored in the duty ratio storage independently for the LED of each of colors; and a signal line connected to the duty ratio storage to input the duty ratio to the duty ratio storage.

5. (Original) The LED driving device according to claim 4, wherein the applied voltage storage stores an applied voltage value for the LED of each of colors enabling the LED of each of colors to emit light in luminance more than or equal to a desired luminance, while the duty ratio storage stores a duty ratio for bringing an emission luminance of the LED of each of colors close to the desired luminance.
6. (Original) The LED driving device according to claim 4, wherein the duty ratio storage stores independent duty ratios on LEDs of the same color.
7. (Original) The LED driving device according to claim 1, wherein among LEDs of red, green and blue, red LEDs undergo cascade connection.
8. (Original) The LED driving device according to claim 1, wherein the power supply voltage generator generates a single voltage value, and the applied voltage former has a D/A converter that performs digital/analog conversion on a voltage value stored in the applied voltage storage, and a voltage varying section that converts the single voltage generated in the power supply voltage generator into a voltage of an analog value converted in the D/A converter.

9. (Original) A driving voltage setting device that sets a driving voltage of the LED driving device according to claim 1, comprising: a voltage applier that applies a variable voltage to the LED of each of colors, red, green and blue; a detector that detects a luminance of the LED of each of colors when the voltage applier applies the voltage; and a data writer that writes in the applied voltage storage a minimum applied voltage value of the LED of each of colors when the detector detects the luminance more than or equal to a desired value on the LED of each of colors, as an applied voltage value of the LED of each of colors.

10. (Original) The driving voltage setting device according to claim 9, further comprising: a PWM controller that controls the LED of each of colors, red, green and blue, using a PWM signal with a different duty ratio, wherein the data writer writes in memory a duty ratio on the LED of each of colors when the detector detects a desired luminance on the LED of each of colors.

11. (Original) The driving voltage setting device according to claim 9, wherein the voltage applier applies a variable voltage interpedently to each of LEDs of the same color, the detector detects a luminance independently on each of the LEDs of the same color, and the data writer writes a minimum applied voltage value of each of the LEDs of the same color when a luminance more than or equal to a desired value is detected on the each of the LEDs of the same color in the applied voltage storage independently as the applied voltage value.

12. (Original) The driving voltage setting device according to claim 10, wherein the PWM controller controls each of the LEDs of the same color using a PWM signal with a different duty ratio, and the data writer writes in the memory a duty ratio on each of the LEDs of the same color

Appl. No. 10/532,216

Reply to Office Action of July 11, 2007

Attorney Docket No. 26738U

when a desired luminance is detected on the each of the LEDs of the same color.

13. – 16. Cancelled.